



Arizona's Raptor Experience, LLC

April 2017

~Newsletter~

Greetings from Chino Valley!

We hope this newsletter finds you well. Signs of spring are all around us here – the birds are beginning their annual molt, Charlie (the American Kestrel) is busy courting Anne by singing, chirping and offering food items as he would a female kestrel in the wild. Charlie is an imprint, so courting a human seems perfectly natural to him! And we have stopped hunting with the Harris's Hawks until fall as their main prey (cottontails and jack rabbits) are producing young at this time.

Our exciting news is the arrival of a new bird, Bronson, who is a Lanner Falcon. He came to us from the World Bird Sanctuary in Missouri. You can read more about Bronson and other falcons in this issue. Thanks to Bruce Usher for this beautiful photo of Bronson!





Falco

Falcons are found all around the world with the exception of Antarctica and some remote oceanic islands. There are approximately 40 species of falcons, ranging in size from 3.5 ounces to 4.5 pounds! This group of fascinating birds is known for their swiftness in flight, with the larger species reaching beyond 200 mph in a stoop. These long-winged diurnal birds have many things in common with other birds of prey, but differ significantly in several ways.

Many of the characteristics of falcons that separate them from other bird of prey (raptor) families are physical traits. “Raptor” means “to seize” and refers to the use of strong feet and talons used by these birds to capture and kill their prey. Falcons hunt their prey in the air, on the ground and occasionally in water. The structure of their feet and talons varies with preferred prey type; however most falcons do not possess the foot strength of other raptors and therefore utilize their beak to finish the kill. Strong cheek muscles, short beaks and a specialized beak design (look up tomial tooth and notch!) aid these birds in severing the cervical vertebrae of their prey.

Additional physical differences include the long, pointed wings of falcons made up of very stiff quills and feathers of varying lengths that are designed for speed. The sternum (breast bone) has a very deep keel to accommodate large powerful flight (pectoral) muscles, and the nostrils contain tubercles (bony projections) that are thought to act as a baffle which slows air to allow for normal breathing when moving at high speeds.

Besides physical differences (there are more than mentioned here) different behaviors can also be noted in falcons. For example, food caching is universal among falcons, which can help ensure the availability of necessary calories when the hunt is unsuccessful. In addition, there are no falcons that are known for constructing nests.

The Falcons of Arizona's Raptor Experience...



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Schnell
Photos



Cade and Defiant are Peregrine Falcons (*Falco peregrinus*). Their name means wanderer or migrator, which is appropriate as peregrines have the most extensive natural distribution of any bird in the world. Also referred to as a “duck hawk” because of their affinity for hunting waterfowl, peregrines have a long and intricate history with humans. They remain one of the premier and prized species for falconry and have also become a symbol for biological conservation, as their populations were restored from the brink of extinction once the use of DDT was banned in the U.S. in 1972. It should be noted that falconers played a major role in their restoration through captive breeding and release methods. In addition, their ability to adapt to human landscapes, notably skyscrapers in large cities, has aided not only in their recovery but also in their notoriety – people love to watch on webcams as these magnificent birds incubate, feed and teach their offspring the skills to survive in today’s ever shrinking world.

Breeding populations of peregrines are found on every continent except Antarctica. They prefer open landscapes and nest in habitats ranging from arctic tundra to tropical forest. Both the male and female incubate the eggs, giving the other time to hunt for prey. As a result of their distinctive size difference, the female (falcon proper) typically takes larger prey, while the male (tiercel – often 1/3 smaller than the female) takes smaller food items.

Here at Arizona’s Raptor Experience (ARE) we care for Defiant and Cade who serve as ambassadors for their species. Defiant has been with us since December 2014, when we assisted the NYS Department of Environmental Conservation’s Connie Adams with her capture in Buffalo, NY. Defiant and her mate were nesting atop the old Buffalo Psychiatric Center being remodeled to become a posh hotel. Defending her nesting territory, Defiant would dive bomb and make contact with construction workers and security guards, essentially shutting down the multimillion dollar project! Because of the threat to humans, the USFWS determined that she needed to be captured and removed from the site permanently. Using mist nets and a live owl as a lure, she was captured on the roof of an adjacent building and brought into captivity. We agreed to take her in as an education bird to avoid the alternative measure, which was to

euthanize her per instructions from the regional FWS office! Thankfully, she readily accepted Cade as her companion and they live together here at our facility. (Another happy side note – her mate left behind in Buffalo was spotted with a new mate shortly after.)

Cade has been with us for 8 years. He was transferred to us from another educator who obtained him from a rehabilitator in Maine. Cade was found near Acadia National Park with a broken wing that could not be repaired. Although he cannot fly, Cade maneuvers around his enclosure extremely well. We actually witnessed a dramatic improvement in his mobility once Defiant was introduced into his world!



Bronson is a Lanner Falcon (*Falco biarmicus*), a species that hails from Africa, primarily in the eastern and southern parts of the continent. Considered a “desert falcon” this species is rarely found in areas with more than 24.5 inches of rainfall per year. They can also be found in limited parts of northern Africa, the Middle East and Mediterranean coast.

Bronson is a male Lanner, and is therefore smaller than the female of the species which is typical of falcons. In fact, a male’s weight averages about 69% of the female Lanner. Their dimorphism is largely restricted to size, as the male and female are similar in coloration.

The size difference in the birds can be beneficial when hunting. Lanner Falcons are one of the few raptors that hunt cooperatively, with the male generally flushing prey for the female to capture. Both birds will also take turns pursuing prey to tire them out. When prey is less available, small groups of Lanner Falcons will come together and hunt in packs.

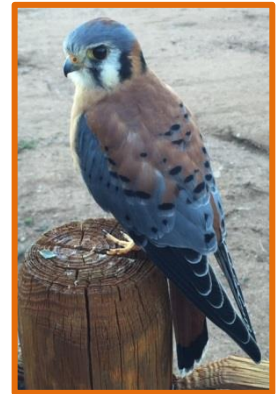
Unlike Peregrine Falcons that are known for their speed in a stoop, Lanner’s use a horizontal hunting style and can reach speeds of 90 mph using just their wingbeats while chasing down prey. They hunt primarily other birds, like doves, sandgrouse and even ducks. They strike the birds in flight, and then follow them to the ground where they finish the kill.

A popular bird for falconry in Africa, Lanner’s are often described as intelligent and pleasant natured birds. We would certainly agree as Bronson has shown

himself to be both of those things. Bronson came to live with us on March 15 of this year. He was transferred from the World Bird Sanctuary in Missouri where he was no longer “in the line-up” of education birds. He is approximately 20 years old and was captive bred in U.S. by Dave Mancini, a well-known breeder.

Photo by Bruce Usher

Charlie (*Falco sparverius*) is a male American Kestrel. The smallest falcon in North America, kestrels are also considered the most brilliantly colored raptor on the continent. They are also the most prolific diurnal raptor producing 4-6 eggs in each clutch and sometimes even producing more than one clutch in a season.



They are also unique among falcons as the only cavity nesting bird of this group. Luckily, they will readily accept a man-made nesting box which allows people to become involved in restoring nesting habitat for these birds who have been on the decline throughout much of their range. Loss of dead trees where natural holes can be found and loss of hunting habitat are major concerns.

Kestrel's hunt open fields and are primarily sit-and-wait predators that hunt from a perch. They locate their prey visually and quickly descend upon mice, grasshoppers, cicadas, lizards and other small prey. Where no perches are available, hover hunting is also a commonly used technique. The bird faces into the wind and flaps its wings rapidly to remain stationary in the sky. They are far more conspicuous when using this strategy, but highly successful when prey is plentiful. Unfortunately, this technique can also make them vulnerable to hungry Cooper's Hawks (*Accipiter cooperii*).

Charlie is a falconry bird who came to live with us in January of this year while his original handler (our friend Jan) travels out of the country. He is an excellent ambassador for the Kestrel Partnership project we are volunteering for with AZ Game and Fish. We have placed 23 kestrel nesting boxes to date with 12 more currently in production. Our goal is 50 this year!

Guest photo:



Bronson

Lanner Falcon (Falco biarmicus)

Photo by Bruce Usher